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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,992	03/22/2001	Tomoki Hirota	Q63598	2670

7590

05/22/2002

SUGHRUE, MION, ZINN, MACPEAK & SEAS
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EXAMINER

WARREN, MATTHEW E

ART UNIT PAPER NUMBER

2815

DATE MAILED: 05/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/813,992

Applicant(s)

HIROTA, TOMOKI

Examiner

Matthew E. Warren

Art Unit

2815

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 1-4 and 8-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

This Office Action is in response to the Election filed on March 27, 2002.

Election/Restrictions

Applicant's election of Group III, claims 5-7 in Paper No. 4 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 1-4 and 8-10 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 4.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 5 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 includes the limitation of "windows including windows associated respectively with adjacent ones of said fuse electrodes and disposed in respective positions which are different from each other in a direction in which fuse electrodes extend." The limitation renders the claim vague because it is not clear as to how the "windows included windows." Does this mean that the windows have other windows within a window or do two or more adjacent windows cross each other. Furthermore, its not clear how the windows are "associated respectively with adjacent ones [windows] of said fuse electrodes. The term "associated" renders the limitation vague. The examiner cannot determine if "associated" is to mean that two adjacent windows coexist in the same plane or if their boundaries cross each other.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 7, as far as understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicant's Prior Art Figure (APAF) 1B in view of Abe (JP-07-273200 A).

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APAF 1B shows an integrated circuit device comprising a plurality of fuse electrodes (130) extending parallel to each other. A window (131) is associated with all of the fuses and is defined by an insulating film (114) having a thickness which allows a laser beam to pass through to cut off the fuse. The plurality of fuses include adjacent fuse electrodes disposed in respective layers which are different from each other (each fuse has its own imaginary layer if viewed from the top). APAF 1B shows all of the elements of the claims except the plurality of windows wherein each window is formed over each fuse in the plurality of fuses. Abe discloses (abstract) an integrated circuit having fuses (1, 2, 3) covered by a plate (4) that has windows (12, 22, 32) associated with each individual fuse. The windows allows a specific fuse to be cut without damaging an adjacent fuse. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the single window in the insulating layer of the APAF by forming an a window over each individual fuse as taught by Abe to prevent damage to an adjacent fuse during the laser cut process.

Claim 6, as far as understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicant's Prior Art Figure (APAF) 1B in view of Abe (JP-07-273200 A) as applied to claim 5 above, and further in view of Lee et al. (US 5,872,390).

The Applicant's Prior Art Figure (APAF) 1B in view of Abe shows all of the elements of the claims except the insulating region having a thickness which prevents a laser beam from damaging the fuse. Lee discloses a fuse structure in which an

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insulating layer (104) has a region (120) other than the window having a thickness that prevents a laser beam from damaging the fuse electrodes (col. 3 line 66-col. 4, line 10).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Huggins et al. (US 5,989,783) also shows semiconductor devices having fuse electrodes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew E. Warren whose telephone number is (703) 305-0760. The examiner can normally be reached on Mon-Thurs, and alternating Fri, 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lee can be reached on (703) 308-1690. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3432 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

MEW
MEW
May 20, 2002


EDDIE LEE
SUPERVISORY PATENT EXAMINER
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